<sup>8</sup>, 38 9,15

U.S. Application Serial No. 09/447,500

Please Amend the Claims as follows:

1. (Currently Amended) An article of manufacture including a sequence of instructions stored on a computer-readable media which when executed by a <u>computer</u> network node cause the network node to perform the acts of:

analyzing computer data transmissions to determine what type of data is contained in the computer data transmissions:

modifying an alert variable based on the computer data transmissions originating from one or more suspect computer nodes;

triggering a first response when said alert variable reaches a first predetermined threshold level; and

triggering a second response when said alert variable reaches a second predetermined threshold level.

- 2. (Original) The article of manufacture as claimed in claim 1 further including the step of triggering additional responses when said alert variable reaches one or more additional threshold levels.
- 3. (Currently Amended) The article of manufacture as claimed in claim 1 wherein one of said triggered responses includes a passive scan of one or more of said suspect computer nodes.
- 4. (Currently Amended) The article of manufacture as claimed in claim 3 wherein said passive scan includes the step of recording the computer data transmissions in a log file.
- 5. (Currently Amended) The article of manufacture as claimed in claim 1 wherein one of said triggered responses includes an active scan of one or more of said suspect computer nodes.

- 6. (Currently Amended) The article of manufacture as claimed in claim 5 wherein said active scan includes the step of retrieving information about one or more of said suspect computer nodes including the network address of said suspect computer nodes.
- 7. (Currently Amended) The article of manufacture as claimed in claim 5 wherein said active scan includes the step of determining the network route taken by data originating from one or more of said suspect computer nodes.
- 8. (Currently Amended) The article of manufacture as claimed in claim 1 wherein one of said triggered responses includes said <u>computer</u> network node requiring increased authentication from any other <u>computer</u> node before providing access to its resources.
- 9. (Original) The article of manufacture as claimed in claim 8 wherein said increased authentication includes the step of forcing two or more logins before providing access to its resources.
- 10. (Currently Amended) The article of manufacture as claimed in claim 1 wherein one of said triggered responses includes the step of blocking incoming computer data transmissions.
- 11. (Currently Amended) The article of manufacture as claimed in claim 1 wherein said alert variable responds differently over time to particular types of computer data transmissions.
- 12. (Currently Amended) The article of manufacture as claimed in claim 11 wherein said alert variable continuously increases in response to the continuous receipt of a particular type of computer data transmission until the alert variable reaches a predetermined value.

- 13. (Currently Amended) The article of manufacture as claimed in claim 12 wherein said particular type of <u>computer</u> data transmission originating from said suspect <u>computer</u> node is an invalid login attempt.
- 14. (Currently Amended) The article of manufacture as claimed in claim 11 wherein said alert variable initially increases in response to the continuous receipt of a particular type of computer data transmission and subsequently decreases in response to the continued receipt of said particular type of computer data transmission.
- 15. (Currently Amended) The article of manufacture as claimed in claim 14 wherein said particular type of computer data transmission originating from said suspect computer node is a computer data transmission which retrieves information about said computer network node (e.g., the "ping" command).
- 16. (Currently Amended) The article of manufacture as claimed in claim 1 wherein said <u>computer</u> data transmissions are analyzed by said <u>computer</u> network node on a network packet level.
- 17. (Currently Amended) The article of manufacture as claimed in claim 16 wherein said <u>computer</u> data transmissions are filtered by said <u>computer</u> network node on a network packet level.

18. (Currently Amended) An article of manufacture including a sequence of instructions stored on a computer-readable media which when executed by a <u>computer</u> network node cause the computer network node to perform the acts of:

analyzing computer data transmissions to determine what type of data is contained in the computer data transmissions;

modifying a first suspect-specific alert variable based on the computer data transmissions originating from a first suspect computer node; [[and]]

modifying a second suspect-specific alert variable based on the computer data transmissions originating from a second suspect computer node; and

triggering a suspect-specific response when either of said suspect-specific alert variables reach a predetermined threshold level.

- 20. (Currently Amended) The article of manufacture as claimed in claim 18 including the act of modifying an overall alert variable based on said <u>computer</u> data transmissions originating from each of said suspect <u>computer</u> nodes.
- 21. (Currently Amended) The article of manufacture as claimed in claim 20 including the act of triggering a response towards each one of said plurality of suspect <u>computer</u> nodes when said overall alert variable reaches a predetermined threshold value.
- 22. (Currently Amended) The article of manufacture as claimed in claim 20 wherein said overall alert variable is more responsive to new types of <u>computer</u> data transmissions than to <u>computer</u> data transmissions previously received at said <u>computer</u> network node.
- 23. (Currently Amended) The article of manufacture as claimed in claim 22 including the act of initially increasing said overall alert variable in response to the computer data transmissions originating from a particular suspect computer node and subsequently decreasing said overall alert variable upon continued receipt of said computer data transmissions from said particular suspect computer node.

- 24. (Currently Amended) The article of manufacture as claimed in claim 18 including the act of communicating each of said suspect-specific alert variables to a network database residing on a <u>computer</u> server node.
- 25. (Currently Amended) The article of manufacture as claimed in claim 20 including the act of communicating said overall alert variable to a network database residing on a <u>computer</u> server node.
- 26. (Currently Amended) An article of manufacture including a sequence of instructions stored on a computer-readable media which when executed by a <u>computer</u> network server node cause the <u>computer</u> network server node to perform the acts of:

storing a plurality of suspect-specific alert variables for a plurality of <u>computer</u> network nodes;

modifying a network alert variable based on the value of each of said plurality of suspect-specific alert variables; and

triggering a network response when said network alert variable reaches a predetermined threshold level.

- 27. (Currently Amended) The article of manufacture as claimed in claim 26 wherein said network response includes the act of notifying each of the plurality of <u>computer</u> network nodes that they should each increase their suspect-specific alert variable towards a particular suspect <u>computer</u> node.
- 28. (Currently Amended) The article of manufacture as claimed in claim 27 wherein said network response includes the act of said <u>computer</u> network server node initiating a passive scan of a particular suspect <u>computer</u> node.
- 29. (Currently Amended) The article of manufacture as claimed in claim 27 wherein said network response includes the act of said <u>computer</u> network server node initiating an active scan of a particular suspect <u>computer</u> node.

- 30. (Currently Amended) The article of manufacture as claimed in claim 29 wherein said network response includes the act of blocking all communication between said suspect computer node and said plurality of computer network nodes.
- 31. (Currently Amended) An article of manufacture including a sequence of instructions stored on a computer-readable media which when executed by a <u>computer</u> network server node cause the <u>computer</u> network server node to perform the acts of:

storing a plurality of overall alert variables for a plurality of <u>computer</u> network nodes:

modifying a network alert variable based on the value of each of said plurality of overall alert variables; and

triggering a network response when said network alert variable reaches a predetermined threshold level.

32. (Currently Amended) A method comprising:

receiving analyzing a first event from a suspect computer node to determine what type of data is contained in the event;

recording said first event in a first data structure having an event count value;

receiving analyzing a second event from said <u>computer</u> suspect node <u>to determine</u> what type of <u>data</u> is <u>contained</u> in the <u>event</u> said second event being of a same type as said first event; and

recording said second event in said first data structure and incrementing said count value if said second event occurs within a predetermined window of time after said first event.

33. (Original) The method as claimed in claim 32 further comprising recording said second event in a second data structure having a count value if said second event occurs outside of said predetermined window of time after said first event.

- 34. (Original) The method as claimed in claim 33 wherein said predetermined window of time is increased responsive to said second event occurring outside of said predetermined window of time.
- 35. (Original) The method as claimed in claim 32 wherein said predetermined window of time is modified based on said first or second event type.
- 36. (Original) The method as claimed in claim 35 wherein said window of time is increased for more serious event types and decreased for less serious event types
- 37. (Original) The method as claimed in claim 36 wherein said event type is an invalid login.
  - 38. (Original) The method as claimed in claim 36 wherein said event type is a ping.
- 39. (Original) The method as claimed in claim 32 further comprising generating a report of all new events which occur over a predetermined time period.
- 40. (Currently Amended) The method as claimed in claim 39 wherein an event is identified as a new event by:

determining whether said event is included in a single data structure with one or more pervious events received in a time period preceding said predetermined time period;

searching all data structures generated during said time period preceding said predetermined time period if said event is not included in said single data structure with one or more previous pervious events; and

including said event in said report if said event is not identified in any data structures generated during said time period preceding said predetermined time period.